

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Final Office Action dated October 16, 2008. Reconsideration and allowance of the application in view of the remarks to follow are respectfully requested.

Claims 1-27 are currently pending in the Application. Claims 1, 8, 23 and 26 are independent claims.

In the Final Office Action, claims 1-5 and 23-25 are maintained as rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,947,905 to Hadjicostis ("Hadjicostis") in view of U.S. Patent No. 6,049,958 to Eberle ("Eberle"). In addition, claims 6-22 and 26-27 are maintained as rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hadjicostis in view of Eberle and further in view of U.S. Patent No. 7,022,080 to Marian ("Marian"). The rejection of claims 1-27 is respectfully traversed. It is respectfully submitted that claims 1-27 are allowable over Hadjicostis in view of Eberle alone, and in view of Marian for at least the following reasons.

It is undisputed that Hadjicostis fails to disclose or suggest "the use of one common surface of the integrated surface for placement of both the acoustic elements and connection means ..."

(See, Office Action, page 4, first full paragraph.) While Eberle is relied on for showing that which is not disclosed or suggested by Hadjicostis, it is respectfully submitted that continued reliance on Eberle is misplaced.

The Final Office Action notes on page 5 continuing onto page 6 in a Response to Arguments section that (emphasis added) "Applicant has noted that the transducer elements are positioned away from the IC chips in figure 1 of Eberle et al. While this is true, the two components still share a common surface, which is what is currently being claimed."

It is respectfully submitted that the above statement from the Final Office Action is a misstatement of what is "currently being claimed." What is recited for example in claim 1 of the pending patent application is that (emphasis added) "connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit."

Accordingly, while the integrated circuit (6) in Eberle, FIG. 1, shares a common surface with the transducer elements (8), it is a common surface of the flexible circuit. Further, as clear from FIG. 1, the transducer (8) is not arranged on a common surface of the integrated circuit (6) as recited in the claims. In fact, as

previously pointed out, FIG. 1 of Eberle unquestionably shows that the transducer elements (8) are positioned away from the IC chips (6), a point which is undisputed in the Final Office Action. Accordingly, it is not clear how the Final Office Action can maintain that Eberle shows the acoustic elements (transducer elements (8) of Eberle) are arranged on a surface of the integrated circuit (IC chips (6) of Eberle), when it is admitted in the Final Office Action that the transducer elements (8) are positioned away from the IC chips (6).

In view of the above, it is respectfully submitted that the ultrasonic transducer of claim 1 is not obvious in light of Hadjicostis in view of Eberle. For example, Hadjicostis in view of Eberle does not disclose or suggest, an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis provided) "first connection means for connecting said acoustic elements to said integrated circuit; and second connection means for connecting said integrated circuit to electrical transmission lines, connection sites for said first and second connection means and said acoustic elements being arranged on a common surface of said integrated circuit" as recited in Claim 1, and as similarly claimed in claims 8 and 23.

It is further respectfully submitted that Hadjicostis in view of Eberle and Marian does not disclose or suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis and both the acoustic assembly and the electronic components are positioned, with respect to each other, along the second axis" as recited in Claim 26.

It is undisputed that Hadjicostis in view of Eberle fails to disclose several elements of claims 6 (See, Final Office Action, page 5.). The Final Office Action relies on Marian (FIG. 2, Col. 3, line 30 through Col. 4, line 45 and Col. 7, line 35 through Col. 8, line 12) as disclosing these elements. However, it is respectfully submitted that reliance on Marian, for supplying that which is admitted in the Office Action as deficient in Hadjicostis in view of Eberle, is misplaced.

For example, in the Final Office Action in a response to Arguments section contained on page 6, it is indicated that "[w]ith respect to each other, the transducer elements and the electrical components are positioned along a second axis (the 180 degree bend ensures this, Figure 2)." While, some axis may be drawn that the transducer elements and the electrical components are spaced apart along, it is respectfully submitted that the recitation of claim 26 provides that the second axis, which the transducer elements and the electrical components are spaced along, extends substantially perpendicular to the first axis which the flexible circuit extends along.

In contrast, the acoustic assembly and the electronic components of Marian are not spaced with respect to each other along a second axis that is perpendicular to the axis that the flexible circuit extends. As shown by FIG. 2 of Marian, the flexible circuit 100 extends along an axis (a first axis) that extends in the same direction (either same axis or at least an axis parallel to) as an axis which the acoustic assembly is spaced from the electronic components (the second axis in terms of claim 26).

Accordingly, it is respectfully submitted that Hadjicostis in view of Eberle in further view of Marian does not disclose or

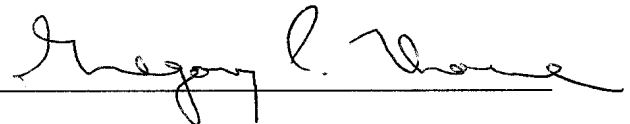
suggest, a method for manufacturing an ultrasonic transducer that amongst other patentable elements, comprises (illustrative emphasis added) "arranging an acoustic assembly on a flexible circuit that extends along a first axis; ... and bending the flexible circuit at least partially around a thermally-conductive body to form at least one 180° bend about the body with the acoustic assembly being spaced from the electronic components along a second axis that extends substantially perpendicular to the first axis and both the acoustic assembly and the electronic components are positioned, with respect to each other, along the second axis" as recited in Claim 26.

Based on the foregoing, the Applicants respectfully submit that independent Claims 1, 8, 23 and 26 are patentable over Hadjicostis in view of Eberle alone, and in view of Marian and notice to this effect is earnestly solicited. Claims 2-7, 9-22, 24-25 and 27 respectively depend from one of Claims 1, 8, 23 and 26 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

By 

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